

## Statement of Interest (SOI) – Community for Data Integration (CDI) FY 2014

**CDI Science Support Framework Category:** Data and Information Assets (SSF3)

**Project Title:** North American Bat Data Integration

**Lead USGS Cost Center:** Fort Collins Science Center

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### PROJECT SUMMARY

There are 2 proposed goals for this project proposal: 1) to integrate White-Nose Syndrome (WNS) diagnostic data into the USGS Bat Population Data (BPD) Project (<http://my.usgs.gov/bpd>); and, 2) to incorporate the historical bat banding data into the BPD. The Fort Collins Science Center (FORT) currently houses the BPD and in the last two years has invested nearly \$75K towards its development. The BPD is also intended to be the data framework for a North American Bat Monitoring Program (NABat), a multi-agency collaborative effort initially conceived through the National Plan for WNS, but now extended to use monitoring data to understand how bats respond to changes occurring on the landscape or in response to management actions over short and long periods of time.

- 1) White-Nose Syndrome (WNS) is an emerging and devastating disease of hibernating insectivorous bats in North America. WNS is associated with extensive mortality of bats in eastern North America. A National Plan for assisting states, federal agencies, and tribes in managing WNS was developed in 2011 and this plan identifies 7 working groups one of which is Data and Technical Information Management. The main goal of this working group, of which Laura Ellison is the national lead, is to “provide a database system that can be used by state, federal, and tribal agencies, and serve as a central repository for nationwide analyses and specific projects.” In 2010, FORT developed a WNS Disease Tracking System in order to track and share information regarding bat specimens submitted for WNS verification (<http://my.usgs.gov/wns/samplingPerspective/sampling>). This system allows State WNS points-of-contact (POC) to securely manage their specimen submission data and results from diagnostic labs. However, as WNS has continued to rapidly spread, state POCs have struggled to manage the continually increasing amount of data, slowing down research and management communities in acquiring the latest disease information. We therefore propose migrating the diagnostic results directly into the BPD by developing partnerships with the diagnostic laboratories. The BPD provides a more robust data and systems architecture than the current WNS application. We will continue to provide state POCs secure data management features and dramatically

improving the usability and data distribution capabilities. The National Wildlife Health Center (NWHC) will be the pilot diagnostic laboratory for this proposed project with additional diagnostic labs included in the future.

- 2) The U.S. Government administered, coordinated, and maintained a national Bat Banding Program from 1932 to 1972. The files and documentation for this program are currently maintained by the USGS, Patuxent Wildlife Research Center, Smithsonian Institution, Washington, DC. More than 2 million bat bands were issued during the program, of which approximately 1.5 million were applied to 36 species of bats by scientists, their students, and colleagues in many locations in North America including the United States, Canada, Mexico, and Central America. The files currently exist in approximately 90 drawers of 3x5-inch index cards with banding information. There are also correspondence files (memoranda), gray literature, and anecdotal information on handwritten pieces of paper. In collaboration with Region 3 US Fish and Wildlife Service, FORT is developing a national clearinghouse for banded bats in order to optimize information obtained from marked animals. By including the historical Bat Banding Program files in this clearinghouse, the utility of the data repository would be vastly improved, allowing for the use of a valuable and currently inaccessible resource. There is considerable interest within the scientific community for easy access to historical records of banding at sites now infected with WNS or potentially threatened by wind energy development. We propose to convert all of these files into a digital database application in the BPD to allow accessibility of these important files to the bat research community.

#### ESTIMATED BUDGET

Budget Category	Funding Requested	Matching Funds
<b>1. SALARIES (including Benefits)</b>		
Personnel Total	\$8,000.00	
Contract Personnel Total	\$26,373.00	
<b>Total Salaries:</b>	<b>\$34,553.00</b>	
<b>2. TRAVEL EXPENSES</b>		
Travel Total; x # of Trips:	\$0	
Other travel expenses:	\$0	
<b>Total Travel Expenses:</b>	<b>\$0</b>	
<b>3. OTHER DIRECT COSTS (itemize)</b>		
Equipment (software, hardware)	\$5,000.00	\$75,000.00
Publication Costs	\$0	
Other expenses	\$3,000.00	\$3,000.00
<b>Total Other Direct Costs:</b>	<b>\$8,000.00</b>	<b>\$78,000.00</b>
<b>Total Direct Costs:</b>	<b>\$42,373.00</b>	
<b>Indirect Costs (%)</b>	<b>\$7,627.00 (15%)</b>	
<b>Grand Total</b>	<b>\$50,000.00</b>	<b>\$78,000.00</b>